

Joshua N. Feinman  
Chief Global Economist Americas



### In a nutshell

- The financial crisis took a temporary toll on the federal budget, but the fiscal pressures are mounting again.
- Although the recent tax and spending legislations are adding to the pressures, the primary culprit remains rising entitlement spending.
- Tough choices lie ahead about how to adjust the budget.

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## A Closer Look

### U.S. fiscal prospects: daunting challenges

#### Overview

The U.S. federal budget is back in the news again. Budget deficits look set to keep rising in the near term – despite the economy's strong cyclical position – and to remain elevated over longer horizons as well. The recent legislations on taxes and discretionary spending are apt to add to the fiscal strains, but the prime culprit remains entitlements, whose inexorable rise threatens to steamroller everything in its path. This problem has been building for years, long before the latest tax and spending bills, and has been widely recognized as the key source of the country's long-term budget challenges.

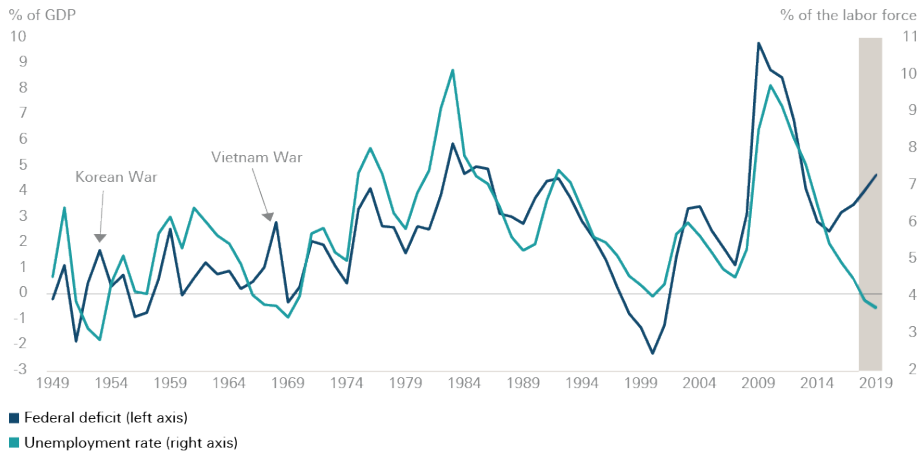
None of this means the U.S. faces an imminent fiscal crisis. No, the problem is less attention-grabbing, more mundane. Simply put, the more resources allocated to entitlements, the less available for everything else. Less room for other government outlays that many deem essential; more need for higher taxes, which could damage incentives to invest and work, to the detriment of the economy's growth potential; and more government borrowing, leaving less saving available to finance productive investments that might otherwise boost productivity and living standards. This "crowding out" of economic output and other priorities is the true cost of the fiscal trajectory that the U.S. is embarked upon. It's not the stuff of sexy headlines about fiscal cliffs. It may not even be directly observable; indeed, it's largely a counterfactual – what might have been, or what might still be, if entitlement spending could be contained. Of course, doing so would have impacts of its own, impacts that are more tangible and easy to identify, which is why implementing changes to these entitlement programs has been politically impossible.

#### Recent developments

The financial crisis and Great Recession took a toll on the federal budget, albeit a temporary one. The most severe economic shock since the 1930s pushed the budget deficit up to a post-WWII high of 9.75% of GDP in fiscal 2009 as revenues collapsed and outlays on income-support programs soared. As the crisis receded, though, so did the deficit – grudgingly at first, as the recovery took time to gain traction and fiscal stimulus was enacted – but faster as the headwinds from the crisis faded, the recovery broadened, and the fiscal stimulus was replaced by some restraint on discretionary spending. By fiscal 2015, the deficit had slipped back under 2.5% of GDP, reversing about 85% of its crisis-driven deterioration, sufficient to stop the ratio of federal debt to GDP from rising any further (it had more than doubled since the crisis). But then, bucking normal cyclical patterns, the progress stopped; despite an economic expansion that continued to drive down unemployment, the budget deficit uncharacteristically began to inch up again, to

3.5% of GDP by fiscal 2017 – before the recent tax cuts and discretionary spending increases went into effect – as revenues disappointed, spending restraint was relaxed, and most ominously, long-simmering structural pressures continued to build. And that's just a prelude.

### An unusual time for large and rising deficits



Sources: Congressional Budget Office, U.S. Bureau of Labor Statistics, Deutsche Investment Management Americas, Inc. as of 4/30/18

### Longer-term trends

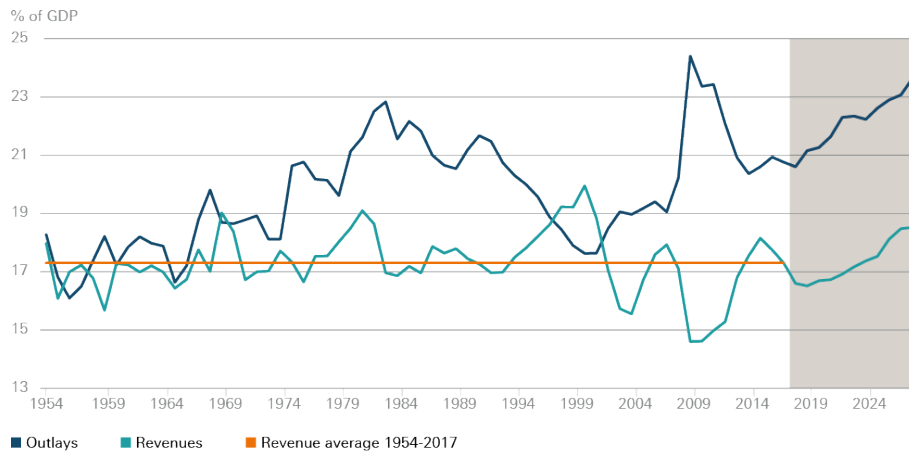
What are these underlying pressures that threaten the long-term fiscal outlook? They're not really on the revenue side. The federal government's tax-take as a share of GDP has been trendless for more than six decades, averaging around 17.5% – through Democrats and Republicans, tax hikes and tax cuts, more during booms and less during downturns, but never veering too far from that average, and tending to return to it over time. Although there's been a bit less of the usual cyclical bounce in revenues the past couple of years, the shortfall has been too small and short-lived to suggest the stable long-term average has been compromised. Even the recent tax legislation won't likely do that. Yes, the tax cuts are apt to push the revenue share down somewhat further over the next few years, on CBO estimates to 16.5% to 16.75% of GDP, which would be unusually low for this phase of an economic cycle (because this is an unusual time to be cutting taxes). But GDP is apt to be a bit larger as well (about one percentage point larger in level terms within five years on CBO estimates), mitigating some, but by no means all, of the revenue loss. Indeed, on CBO reckoning, revenues will be roughly 6% below where they'd be absent the tax change over the next five years, though that shortfall narrows to about 3% over the next ten. And as a share of a slightly elevated GDP, revenues are projected to grind back up to their long-term average within about five years, helped by the base-broadening elements of the tax reform, the temporary nature of other provisions (e.g., full investment expensing), and the impact of "real bracket creep" (i.e., the growth in real incomes that pushes people into higher tax brackets). Beyond that, CBO expects the revenue share to move higher still, eventually back a bit above its long-term average, especially if most provisions of the tax package expire as currently

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scheduled. In short, despite a temporary dip, federal revenues are likely to remain broadly stable as a share of GDP.

## Unbalanced



Source: Congressional Budget Office as of 4/30/18

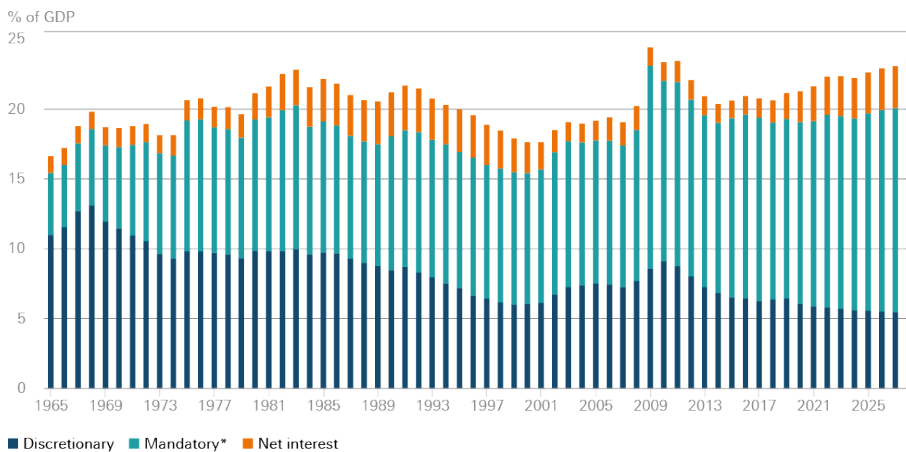
The same cannot be said for outlays. That's where the real structural problems have been brewing, and are slated to intensify. Federal outlays have been edging higher as a share of GDP for decades, albeit erratically. Stripping out transitory influences – a steep decline in the 1990s due to a powerful economic boom and the post-Cold War decline in military spending, and an exaggerated surge in the aftermath of the financial crisis – reveals a modest upward drift. By fiscal 2016 and 2017, for example, though the economy was largely recovered from the financial crisis, federal outlays were nearly 21% of GDP – higher than ever seen in the 1950s, 1960s, or 1970s (save one year in the aftermath of a steep recession). What's more, outlays are expected to climb further, on CBO estimates breaching 23% of GDP within a decade, near the peak seen during the Great Recession. But this time, the spending won't be temporary and cyclical; it will be structural and enduring.

And it's not because the government is going on a discretionary spending spree. True, spending will get a boost from the budget passed earlier this year, also unusual for this stage of a business cycle, and this too will worsen the near-term budget outlook (not least because it doesn't include much in the way of investments like infrastructure that might have enduring economic benefits). But discretionary spending is largely a sideshow. Outlays subject to annual discretionary authorization (military and non-military) have been declining as a share of GDP, and especially as a share of overall federal spending, for decades, and the recent legislation will barely dent that trend. Only about 30% of federal spending is now discretionary, down from as much as two-thirds in the 1960s, and these outlays are now less than 6.5% of GDP, lower than at any time since WWII except a brief period during the late 1990s/early 2000s economic boom and post-Cold War bottom in defense spending. What's more, this downtrend is projected to continue, despite the planned spending boost, with CBO estimating that discretionary spending will slip under 6% of GDP within five years and to about 5.5% in ten. Clearly not the source of the long-term budget problems.

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## Outlays: less discretion



Source: Congressional Budget Office as of 4/30/18

\* Net of offsetting receipts

That dubious distinction belongs to mandatory spending. These are outlays largely outside the purview of annual authorization by Congress, essentially determined by program eligibility rules. They include entitlement programs such as Social Security, medical ones like Medicare, Medicaid, CHIP, and ACA-related subsidies, and income-security programs such as unemployment insurance, SSI<sup>1</sup>, EITC<sup>2</sup>, child tax credit, SNAP, and family welfare. Some of these programs (particularly Medicaid, unemployment insurance, and SNAP) have a counter-cyclical component, rising in downturns as more people qualify, and receding during booms as the rolls diminish. But structural trends predominate, and over time these have been driving spending steadily up, due to a combination of demographics, rising health costs, and expanded programs and eligibility. Mandatory outlays have risen from about 4.5% of GDP in the mid-1960s to 8.75% at the peak of the 1980s expansion, 9.5% at the 2000 peak, 10% prior to the Great Recession, and about 13% now. And there's little relief on the horizon. After a temporary lull, CBO expects mandatory outlays to resume climbing, hitting 13.75% of GDP in five years, and approaching 15% in ten. Almost all the major entitlement programs are contributing to this rise, but the biggest culprits by far are the health-related ones. From a base of essentially zero prior to the mid-1960s, health-related entitlement outlays have marched relentlessly higher, to 5.25% of GDP now, on their way to 5.75% in five years and 6.5% in ten (by which time they will be more than double defense spending). Peering even further over the (admittedly cloudy) horizon, CBO sees entitlement spending trending ineluctably higher still, with health-related outlays remaining in the vanguard.

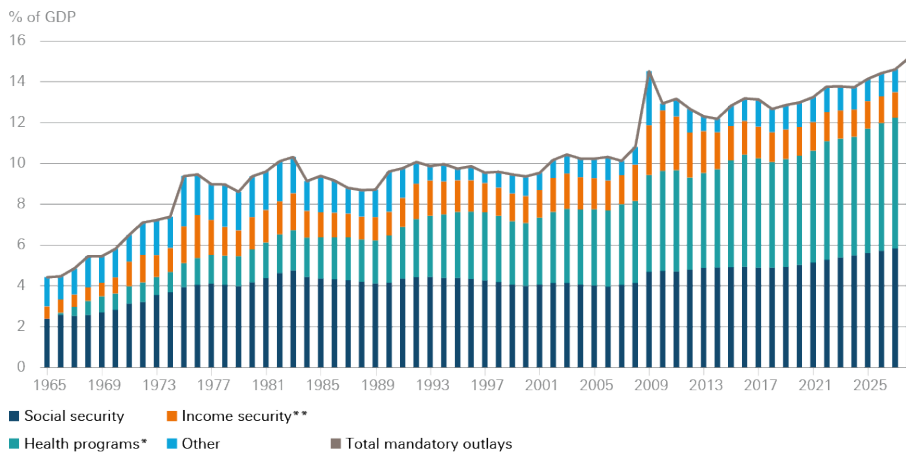
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<sup>1</sup>Supplemental Security Income (SSI) is a U.S. welfare program that pays benefits to disabled adults and children as well as people aged 65 and older who have limited income and resources.

<sup>2</sup>Earned Income Tax Credit (EITC) is a refundable tax credit for people who work and have an income below specific thresholds.

## Unhealthy trends?



Source: Congressional Budget Office as of 4/30/18

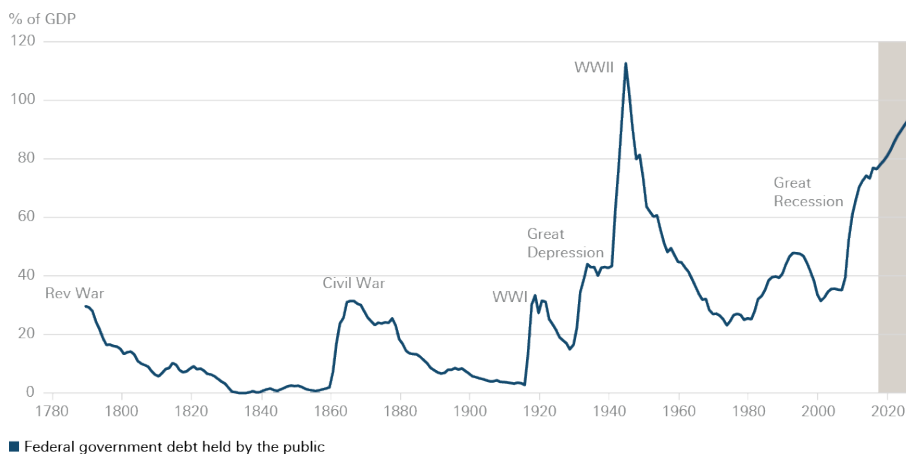
\* Medicare (net of premiums and receipts), Medicaid, CHIP, ACA-related subsidies

\*\* Unemployment comp, SSI, SNAP, EITC and child tax credit, family support, child nutrition, foster care

## Debt

All of this is likely to mean more debt. The U.S. federal debt held by the public already more than doubled as a share of GDP in the aftermath of the Great Recession, reaching about 75% by fiscal 2014, where it has since roughly stabilized. But that stability won't last. With budget deficits projected to run at 4% to 5% of GDP in coming years, the debt/GDP ratio will begin rising again, on CBO estimates reaching 85% in five years and 95% in ten. That would be the highest in U.S. history, save a brief period at the end of WWII. But that was a fleeting blip. This is not. In fact, CBO sees the debt ratio continuing to climb, hitting an all-time high by the 2030s, and rising further from there.

### U.S. federal government debt held by the public



■ Federal government debt held by the public

Source: Congressional Budget Office as of 4/30/18

## Debt servicing

So far, the increase in debt has not pressured the federal budget. Indeed, the net costs of servicing the federal debt have remained blissfully subdued, under 1.5% of GDP, less than half that incurred

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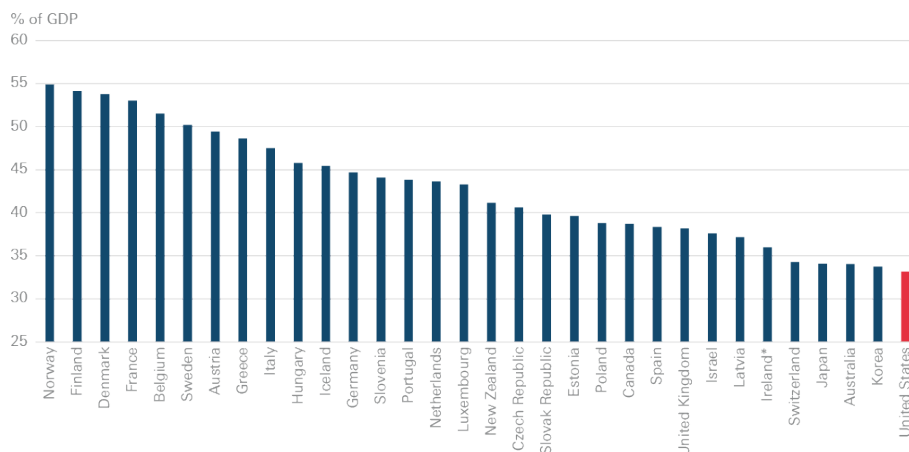
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in the 1980s and 1990s, because low interest rates have offset higher debt levels. But that may be starting to change. The CBO projects that the federal government's interest costs will edge up to 2.5% of GDP within five years and 3% in ten as debt continues to mount and as interest rates return to more "normal" levels. Just where that might be is uncertain, of course. The CBO is penciling in yields of 3% to 4% across the Treasury curve, though alternative rate scenarios are obviously plausible too. Some may doubt, for example, that interest rates can rise to these levels and stay there if the economy's potential growth remains so low (a shade below 2% according to estimates from the CBO, IMF, OECD, and Federal Reserve). So perhaps debt-servicing costs won't increase quite as quickly. But increase they almost surely will, further weighing on the fiscal outlook. Rising interest costs are more a symptom, though, than the underlying cause of the looming fiscal challenges. That's entitlement spending.

### International comparisons

Compared to its OECD peers, the U.S. is a low-tax, small-government country. As a share of GDP, the U.S. is at the bottom of the league tables for government receipts, and near the bottom for government outlays. In other words, the U.S. opts to spend relatively little, and tax even less. As a result, it is more indebted than most, though by no means all OECD countries.

### Total government receipts: U.S. at the bottom of OECD countries



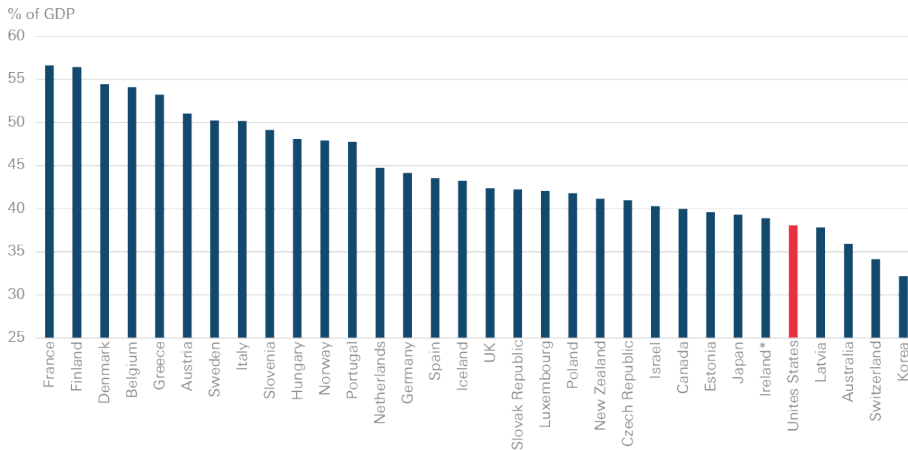
Source: OECD as of 4/30/18

\* For Ireland, GNP is used instead of GDP

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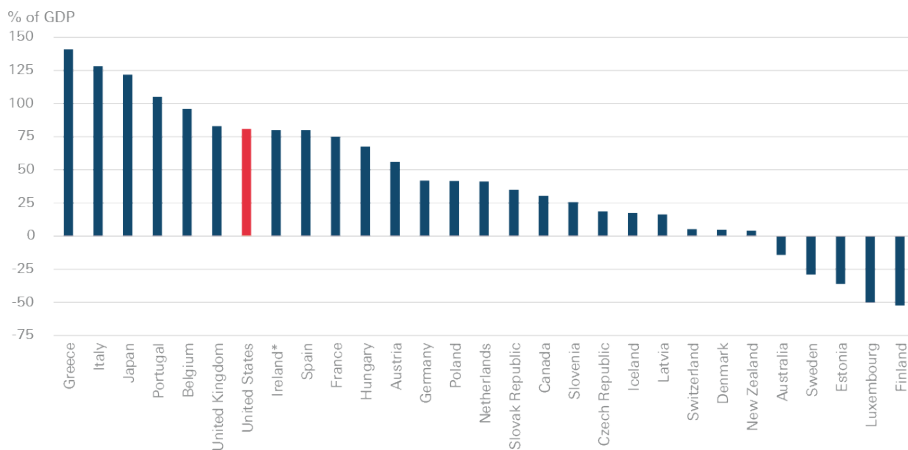
## Total government outlays: U.S. near the bottom of OECD countries



Source: OECD as of 4/30/18

\* For Ireland, GNP is used instead of GDP

## General government net financial liabilities



Source: OECD as of 4/30/18

\* For Ireland, GNP is used instead of GDP

## Implications

Where is all this headed? Some worry about a fiscal crisis, where interest rates spike, the dollar tumbles, and the U.S. government struggles to get funded. Though not unfathomable, that doomsday scenario seems quite unlikely, especially on the foreseeable horizon. Issuing debt denominated solely in its own currency – and the global reserve currency no less, without any credible rival on the horizon – backed by an independent monetary policy, with a long history of honoring its debt obligations, deep and well-functioning capital markets, stable government, the rule of law, and a still-vibrant, innovative economy, affords the U.S. substantial latitude to borrow in global capital markets. Not unlimited, but substantial.

Still, the U.S. fiscal trajectory has consequences. Allowing debt to march ever higher will eventually increase the costs of debt servicing, and with more than 40% of all publicly-held Treasury debt owned by foreign investors, this wouldn't merely entail a reshuffling of income among U.S. taxpayers; it would actually reduce the nation's aggregate income. Having so much debt would also

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make it harder for the government to borrow to cope with future exigencies (wars, recessions, etc.). And as government borrowing puts increasing demands on the limited pool of national savings, some private investment will surely be squeezed out, making the capital stock and the nation's living standards lower than they would otherwise be.

To mitigate these consequences will ultimately require at least stabilizing the debt/GDP ratio, if not bringing it down somewhat. More economic growth would obviously help, though the same demographic trends that are contributing to the entitlement surge are also weighing on growth prospects. If entitlements are not reined in, avoiding a debt spiral will eventually require draconian changes to taxes and/or discretionary spending. If the burden fell entirely on taxes, the revenue share of GDP would have to be raised to its highest ever, and further still beyond the ten-year horizon, as entitlements continue to rise. Virtually all Americans, including the middle class, would be impacted; there just aren't enough "rich" people, however broadly defined and severely taxed, to bear the entire burden. And you don't have to be an ardent "supply-sider" to worry that a tax hike of anything approaching that scope on such a broad segment of the population might adversely impact economic incentives and growth, even if it was structured in the least damaging way possible (by scaling back deductions to limit increases in marginal tax rates). By contrast, if the axe fell entirely on discretionary spending, both defense and non-defense, they would be taken down to their lowest shares of the economy since the early 20th Century, implying a major downsizing of most domestic discretionary programs and of the U.S.'s geopolitical role in the world.

In the end, some combination approach will likely be adopted. Debt ratios will rise somewhat, as will taxes, while discretionary spending is apt to be squeezed further. But entitlements – the elephant in the room – are going to have to be addressed. The consequences of leaving them untouched are simply too grave. Finding the political will is not going to be easy. And even if entitlements are reformed, they'll almost certainly still consume a larger share of the economy as the population ages. So there's still likely to be increased tax revenues, curbs on discretionary spending, and higher debt – just nothing approaching what would be necessary if entitlements were left alone. From the perspective of economic efficiency, tax changes should emphasize "broadening the base" – trimming deductions to limit increases in marginal tax rates and mitigate some of the negative effects of higher taxes on economic activity. Similarly, economic returns ought to play a role in determining which areas of discretionary spending are scaled back. And when it comes to entitlement reform, consideration should be given to changes that encourage people to work longer, save more, and be more judicious in their health-care choices.

But ultimately, the biggest decisions will turn less on economics and efficiency than on politics and normative values. Much will come down to deciding how to spread the adjustment across different groups – taxpayers, beneficiaries, the young, the old, and the as-yet unborn. Tough choices indeed.

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## Glossary

### CBO

The **Congressional Budget Office (CBO)** is a nonpartisan agency which is responsible for conducting objective, impartial analysis of budgetary and economic issues to support the Congressional budget process.

### CHIP

The **Children's Health Insurance Program (CHIP)** provides health coverage to eligible children, through both Medicaid and separate CHIP programs. CHIP is administered by states, according to federal requirements and is funded jointly by states and the federal government.

### Great Recession

The **Great Recession** refers to the prolonged economic downturn in much of the world after the financial crisis of 2007-08.

### Gross domestic product (GDP)

The **gross domestic product (GDP)** is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

### International Monetary Fund (IMF)

The **International Monetary Fund (IMF)**, created in 1945 and headquartered in Washington, D.C., is an organization of 188 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world.

### Medicaid

**Medicaid** is an assistance program providing health coverage to people with low income. It is run by state and local governments within federal guidelines.

### Medicare

**Medicare** is the U.S. national health insurance program for people aged 65 and above and younger people with disabilities or kidney failure.

### OECD

The **Organization for Economic Co-operation and Development (OECD)** started in 1948 as the Organization for European Economic Co-operation (OEEC) and changed its name in 1960, now representing 34 countries with democratic governments and market economies.

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## SNAP

The **Supplemental Nutrition Assistance Program (SNAP)** provides benefits to low-income individuals and families and provides economic benefits to communities. The Food and Nutrition Service (FNS) works with state agencies, nutrition educators, and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance can make informed decisions about applying for the program and can access benefits.

## U.S. Federal Reserve Board (the Fed)

The **U.S. Federal Reserve Board**, often referred to as "**the Fed**", is the central bank of the United States.

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